

## ABSTRACT

This invention is an improvement on typical operating smoke sensors or detectors. By allowing remote detection of smoke/heat, the RF signal detectors presented in this document can turn on their alarms when smoke is detected in other rooms and not by all the detectors in a group. The number of detectors in a group is only limited by the size of the structure in which they are installed. During the winter holidays a Christmas tree smoke/heat detector can be hung on the Christmas tree to give advanced warning if the tree was to ignite. The ornament can transmit to the other detectors in a group, turning all alarms on so anyone in the structure can hear an early warning signal and then hopefully abandon the structure in time.

## Claims1.

1. A wireless smoke sensing system, comprising:
  - (a) multiple smoke sensors capable of sending and receiving RF signals, and
  - (b) each detector having the proper circuitry such as a transceiver system to alarm, send and receive signals by themselves, therefore
  - (c) a smoke sensor can receive an RF signal to turn on an audible warning alarm, and
  - (d) a smoke sensor as claimed in 1. ( c ) that can alarm and transmit a RF signal from inside the same housing of the receiver, allowing
  - (e) each smoke sensor to alarm and transmit to the others in a group, and

- (f) a timer activated pulsing circuit to shut on and off the power to the transmission and reception means, saving battery life, and
- (g) a SCR (Silicone Controlled Rectifier) to latch the reception and transmission of RF signals, and
- (h) antennas to increase the transmission and reception qualities

2. A wireless Christmas Tree smoke and heat sensing bulb, incorporating:

- (a) a RF signal that corresponds to the frequency of signals of the smoke sensors in claim 1, and
- (b) a test button to prove the system is in operating condition